

REMARKS

The Claim Amendments

Claims 1-7 and 9-18 are currently pending and claims 10-16 are withdrawn from consideration.

Applicants have amended claims 1 and 6.

Applicants have amended radical R_2 in claim 1 and claim 6 to remove therefrom subject matter disclosed in European Patent Application EP 0456835 A1, published on November 21, 1991 (hereinafter "EP '835"). Support for this amendment is found in claims 1 and 6 as originally filed. Applicants have also amended claim 1 to recite particular amino protecting group embodiments for radical R_3 . Support for this amendment is found in compound species 1, 5, 6, 21 and 23 at pages 33, 39, 40, 48 and 49, respectively.

None of the amendments add new matter. These amendments are further discussed below in the context of the Examiner's rejections.

The Rejections

35 U.S.C. § 112, Second Paragraph

The Examiner has rejected claims 1-7, 9 and 17 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically the Examiner asserts that the definition of radical R^3 as an "amino protecting group" has indefinite metes and bounds. Applicants traverse for the reasons of record in the Response filed on November 26, 2006.

However, in order to expedite prosecution, applicants have amended claim 1 to recite particular protecting group embodiments for radical R^3 . Specifically, applicants have recited the following chemical moieties: $-C(O)CH_3$, $-C(O)Ph$ and $-SO_2Ph$.

Dependent claims 2-7 and 9 also incorporate this limitation. Accordingly, applicants respectfully request that the Examiner withdraw this rejection.

The Examiner has also rejected claim 17 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. Specifically, the Examiner asserts that dependent claim 17 lacks antecedent basis from its base claim 1 because it recites the groups "acetamido, sulfoxyalkyl and sulfoxyphenyl" which are not recited in claim 1. Applicants traverse.

Each of the three chemical groups recited in claim 17 are present in the definitions for radicals R_3 and R_4 in claim 1. For instance, R_3 and R_4 can be selected from radical R^{14} and R^{14} can be $NR^6C(O)R^6$ (or acetamido when R^6 is hydrogen and methyl, respectively), SO_2R^{15} (or sulfoxyphenyl when R^{15} is aryl/phenyl) and SO_2R^6 (or sulfoxyalkyl when R^6 is alkyl). Additionally, one of skill in the art would readily understand that each of the recited chemical groups $NR^6C(O)R^6$, SO_2R^{15} , and SO_2R^6 may be acceptably interchanged with the terms acetamido, sulfoxyphenyl and sulfoxyalkyl, respectively. Thus, applicants respectfully request that the Examiner withdraw this rejection.

35 U.S.C. § 102 (b)

The Examiner has maintained the rejection of claims 1-7 and 9 and added a rejection to claim 17, under 35 U.S.C. § 102 (b), as being anticipated by EP '835. The Examiner asserts that EP '835 teaches specific compound species (compound #93, and #108) that read on formula I in instant claims 1-7, 9 and 17.

In response to the rejection and as discussed above, applicants have amended claim 1 and claim 17 to remove

therefrom subject matter disclosed in EP '835. Specifically, applicants have amended radical R_2 to recite " R_2 is an unsubstituted aliphatic, or a cycloaliphatic-aliphatic or heteroarylaliphatic...". Thus, the claims as amended exclude the R_2 "arylaliphatic" species disclosed in EP '835. Therefore, applicants respectfully request that the rejection of claims 1-7, 9 and 17 as anticipated by EP '835 be withdrawn.

35 U.S.C. § 103

The Examiner has maintained the rejection of claims 1-7 and 9 and added a rejection to claim 17, under 35 U.S.C. § 103(a), as being unpatentable over EP '835. According to the Examiner, EP '835 teaches several species (compound numbers 93 and 108 at pages 17 and 19, respectively of European Patent Application EP 0456835 A1) and a genus (generic formula I, at page 3 of European Patent Application EP 0456835 A1) "that read on various aspects of the invention" and are useful as inhibitors of platelet aggregation. The Examiner asserts that "the skilled chemist would have been motivated to make other compounds of the claimed formula I because said compounds would have been expected to inhibit platelet aggregation as well." The Examiner concludes "at the time the invention was made, it would have been obvious to make and use compounds of the claimed formula I in view of the teaching above." Applicants respectfully traverse in light of the above amendments and for the reasons of record in applicants' Response mailed on November 27, 2006. Applicants' previous arguments are re-presented below.

EP '835 neither teaches nor suggests the compounds of the present invention nor does EP '835 render obvious the claimed utility of the compounds of the present invention (e.g., treating autoimmune diseases, proliferative disorders, angiogenic disorders, and

cancer). Applicants submit that EP '835 neither teaches nor suggests the compounds of the instant claims, as amended, or the use of those compounds for inhibiting SHP-2 phosphatase activity or for treating or lessening the severity of a SHP-2-mediated disease. Rather, EP '835 discloses compounds that are useful in treating platelet aggregation based on their ability to modulate aldose reductase. Therefore, EP '835 cannot be fairly viewed as teaching or suggesting the compounds of the amended claims of the instant application. Furthermore, based on the EP '835 disclosure, one of skill in the art would not find it obvious that the compounds of the present invention would have the claimed utility. Accordingly, applicants respectfully request that the Examiner withdraw this rejection of these claims under 35 U.S.C. § 103 (a).

Conclusion

Applicants request that the Examiner enter the above amendments, consider the foregoing remarks and allow the pending claims to pass to issue.

Respectfully submitted,

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